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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/756,164	01/12/2004	Ronald Geurts	GIA1480	3353
25548	7590	12/29/2005	EXAMINER	
DLA PIPER RUDNICK GRAY CARY US, LLP 4365 EXECUTIVE DRIVE, SUITE 1100 SAN DIEGO, CA 92121-2133			ALLAWI, ALI	
			ART UNIT	PAPER NUMBER
			2877	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/756,164	GEURTS, RONALD	
	<b>Examiner</b>	<b>Art Unit</b>	
	ALI ALLAWI	2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-19 is/are allowed.
- 6) ☒ Claim(s) 20, 21 and 24-31 is/are rejected.
- 7) ☒ Claim(s) 22-23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/27/2005.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The Information Disclosure Statement filed 27 September 2005 has been entered and the reference(s) considered by the examiner.

### ***Claim Rejections - 35 USC § 102***

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 20, 27-28, and 30-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Yifrach et al. (5,118,181).

In regards to claims 20, 27 & 28, Yifrach et al. discloses a fluorescence measuring device for gemstone under test that comprises an ultraviolet radiation source that provides radiation to the gemstone, and a light detector positioned proximate the gemstone under test, and configured to measure directly the intensity of visible light emitted from the gem stone in reaction to the applied UV radiation. Yifrach et al. further discloses a processor that measures the detected fluorescence of the gemstone for identification purposes (Please see Figure 2, Column 1: 51-68, Column 4: 21-45, Column 5: 13-20)

In regards to claim 30, Yifrach et al discloses a method wherein the measuring step comprises measuring with a light meter or a light detector the visible light emitted from the gemstone in reaction to the UV radiation.

In regards to claim 31, Yifrach et al. discloses the method stated above, further comprising a display of light intensities and spectra measured by the light detector. The

unit of the flux density measurement is not disclosed however, the measurement unit can be any in which one can read and interchange with another unit system. (Column 2: 40-50, Figure 1)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yifrach et al. (5,118,181) in view of Coleman (5,955,735).

In regards to claim 21, Yifrach et al. discloses everything as stated above, except for the UV radiation source to comprise a light emitting diode. Coleman discloses an apparatus and method for identifying gemstones that comprises the use of an ultraviolet emitting light source such as an LED. It would have been obvious at the time the invention was made to use an ultraviolet LED source at the time of the invention because they are more readily available and cheaper to use, as well as better intensity emission of the sources.

In regards to claims 24 and 25, Yifrach et al. further discloses a microprocessor used for controlling the ultraviolet light source. This entails controlling of the microprocessor through a user interface and control of the ultraviolet light includes the power and current fed to the LED for intensity variations. (Column 5: 9-12)

Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yifrach et al. in view of Okazaki (4,508,449)

In regards to claim 26, Yifrach discloses everything as stated above, except for a light detector configured such that its spectral response simulates the spectral response of human eye. Okazaki discloses fluorescence-measuring device in which a diamond is irradiated with an ultraviolet component of wavelength 350nm and a measurement unit for measuring a spectrum of the detected light and an arithmetic unit for deriving tristimulus values from the spectrum. (See abstract, Column 2: 15-31)

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yifrach et al.

In regards to claim 29, Yifrach et al. discloses a method in which the radiating step radiates the gemstone under test with UV radiation source in a closed emission chamber. (Figure 2) Yifrach et al. however, does not specifically disclose an emission chamber that has substantially no visible light except for the visible light emitted from the gemstone, in reaction to the UV radiation. It would have been obvious at the time of the invention to disclose that the closed spherical chamber disclosed by Yifrach et al. contains no substantial visible light in order to properly measure the visible light emitted from the irradiated stone and eliminate any visible light contaminants.

***Allowable Subject Matter***

Claims 22-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination, fails to disclose or render obvious a fluorescence measuring device wherein the UV radiation source comprises a plurality of upper and lower LEDs emitting on an axis towards each other, in combination with the rest of the limitations of claim.

***Response to Arguments***

Applicant's arguments see remarks, filed 27 September 2005, with respect to claims 1-19 have been fully considered and are persuasive. The previous rejection under 35 U.S.C. 102 and 35 U.S.C. 103 of claims 1-19 has been withdrawn.

***Examiner's Reasons for Allowance***

Claims 1-19 are allowed over the prior art of record.

The following is an examiner's statement of reasons for allowance:

As to claim 1-19, the prior art of record, taken alone or in combination, fails to disclose or render obvious an ultraviolet radiation source configured to provide trans-radiation and direct radiation, an upper and lower UV radiation sources, and radiating from above and below the gemstone under test, in combination with the rest of the limitations of the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Additional Prior Art***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The references listed in the attached form PTO-892 teach of other prior art that may anticipate or obviate the claims of the applicant's invention

### ***Conclusion***

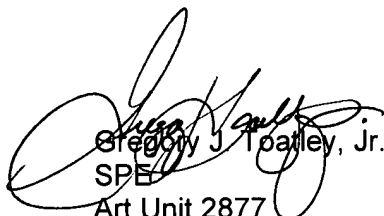
**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Allawi whose telephone number is **571 272 8285**. The examiner can normally be reached on Monday through Friday, 8am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on **571 272 2800 ext. 77**. The fax phone number for the organization where this application or proceeding is assigned is **571 273 8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Gregory J. Toatley, Jr.  
SPE  
Art Unit 2877  
*PT Dec 05*

  
AA  
12/05/05